

## **I/WE CLAIM**

1. A cooking appliance comprising:  
a cooktop;  
a plurality of heating zones arranged on the cooktop, at least one of said plurality of heating zones including a first heating element and a second heating element; and  
a control element operatively connected to each of the first and second heating elements and movable from a home position through a temperature adjustment zone, wherein initial movement of the control element from the home position in a first direction activates only the first heating element and, initial movement of the control element from the home position in a second direction activates the first and second heating elements, said control element being movable through the temperature adjustment zone to regulate operation of the first heating element or both the first and second heating elements respectively.
2. The cooking appliance according to claim 1, wherein movement of the control element through the temperature adjustment zone back to the home position deactivates the at least one of the plurality of the heating zones.
3. The cooking appliance according to claim 1, further comprising:  
a controller operatively connected to the control element; and  
first and second relays operatively connected to the first and second heating elements respectively, wherein the controller activates the first relay when the control element is moved in the first direction and both the

first and second relays when the control element is moved in the second direction.

4. The cooking appliance according to claim 3, wherein the control element includes a variable resistor, said controller being adapted to detect whether the control element is moved in the first or second direction based upon a change in resistance of the variable resistor.

5. The cooking appliance according to claim 1, wherein the second heating element is arranged about the first heating element.

6. The cooking appliance according to claim 1, further comprising: a display for indicating operation of at least one of the first heating element or both the first and second heating elements.

7. The cooking appliance according to claim 1, wherein the control element is rotatable through the temperature adjustment zone.

8. The cooking appliance according to claim 7, wherein the control element is rotatable through nearly 360° in the temperature adjustment zone to regulate operation of either the first heating element or both the first and second heating elements.

9. A cooking appliance comprising:  
a cooktop;  
a plurality of heating zones arranged on the cooktop, at least one of said plurality of heating zones including a first heating element and a second heating element; and

control means operatively connected to each of the first and second heating elements and movable from a home position through a temperature adjustment zone, wherein initial movement of the control means from the home position in a first direction activates only the first heating element and initial movement of the control means from the home position in a second direction activates both the first and second heating elements, said control means being movable through the entire temperature adjustment zone to regulate operation of the first heating element or both the first and second heating elements respectively.

10. The cooking appliance according to claim 9, wherein the control means is movable through the temperature adjustment zone back to the home position to deactivate the at least one of the plurality of heating zones.

11. The cooking appliance according to claim 9, further comprising:  
a controller operatively connected to the control means; and  
first and second relay means operatively connected to the first and second heating elements respectively, wherein the controller activates the first relay means when the control means is moved in the first direction and both the first and second relays when the control element is moved in the second direction.

12. The cooking appliance according to claim 11, wherein the control means includes a variable resistor, said controller being adapted to detect whether the control means is moved in the first or second direction based upon a change in resistance of the variable resistor.

13. The cooking appliance according to claim 9, wherein the second heating element is arranged about the first heating element.
14. The cooking appliance according to claim 9, further comprising: a display for indicating operation of at least one of the first heating element or both the first and second heating elements.
15. The cooking appliance according to claim 9, wherein the control means is rotatable through the temperature adjustment zone.
16. The cooking appliance according to claim 15, wherein the control element is rotatable through nearly 360° in the temperature adjustment zone to regulate operation of either the first heating element or both the first and second heating elements.
17. A method of operating a heating zone having first and second heating elements on a cooktop of a cooking appliance comprising:
- shifting a control element from a home position into a temperature adjustment zone;
  - sensing a direction of movement of the control element from the home position;
  - activating only the first heating element if the control element is shifted in a first direction and activating both the first and second heating elements if the control element is shifted in a second direction; and
  - enabling temperature control for either the first heating element or both of the first and second heating elements, depending upon the direction of movement of the control element, throughout the entire

temperature adjustment zone until the control element is repositioned in the home position.

18. The method of claim 17, wherein sensing the direction of movement of the control element includes detecting changes in resistance of a variable resistor operatively connected to the control element.

19. The method of claim 18, further comprising:  
activating a first relay to operate the first heating element if the control element is shifted in the first direction; and  
activation both the first relay and a second relay to operate both of the first and second heating elements if the control element is shifted in the second direction.

20. The method of claim 17, further comprising: displaying an operational state of at least one of the first and second heating elements.